avic

VIEW-i

VIEW-i Lite/Pro/Silver/Gold/Ruby
User Manual v.2.6.24

Please read carefully before using this product.

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※ Warranty

1. Liability

1. This product was designed to assist you in driving safely by recording driving information and data for driver reference.

2. This product does not guaranteed to record information on every accident.
- A minor force will not trigger the G-Force sensor to activate Event Recording. Therefore the user must use the Manual Record Button located on the device itself.

3. This product is not liable for any data loss caused by physical damage to the product or it accessories.

4. The manufacturer has no liability for any injury or damage to property associated with the use of this product

5. The manufacturer limits any and all liability to the exclusive remedies of product repair or replacement at the manufacturer's discretion, to the fullest extent permitted by the law

2. Precautions (Device)

Do not open/fix/alter this device
Any customer alterations will void the warranty

Do not use any accessories other then those included with the recorder
The use of any additional accessories will void the product warranty

Do not connect the device directly to car's battery
Connecting the device directly to the car's battery will void the product warranty.

Use this product only under the recommended power guidelines
Using this product in alternative power situation will void the product warranty and could result in fire

Remove all substance from the lens, including the plastic film, that may affect the quality of the recording Any obstruction may degrade recording quality.

Do not expose this product to extreme temperatures (high or low)
This product will be damaged if it is exposed outside recommended working temperature

Do not operate product while driving
Only operate in safe environments

Only install this product within the recommended installation area
It could result in poor GPS reception

If product is physically damaged during a fatal accidents, it may not record any data

During sudden lighting changes, such as entering a dark runnel, alley, or turning toward direct sunlight on a very bright day, video recording may be compromised due to the limitations of video technology

Check the product frequently to ensure that the camera angle is properly adjusted
After violent force is applied to the vehicle or product, the camera angle may be altered resulting in poor picture quality

Do not spray automobile cleaning products directly to product
Product will be damaged if directly exposed to cleaning products

2. Precautions (SD Card)

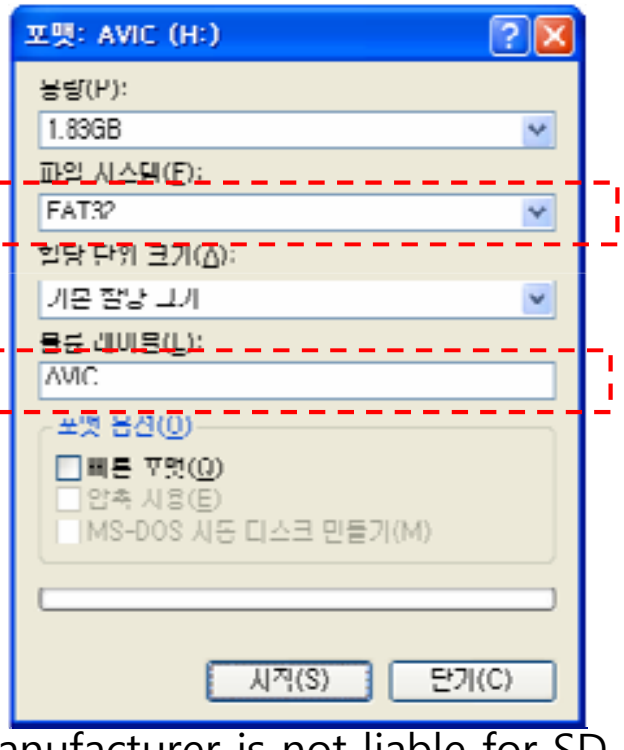
Only use SD memory card from the manufacturer
Product may not function correctly if un-tested SD memory cards is used

Do not open/fix/modify SD memory card
Product could be damaged and warranty does not cover such damage.

SD memory card need to be replaced with a new product once it reaches end of product life Product might malfunction if SD card's writing speed decreases.

Backup from SD memory card to HDD or CD if any data needs to be preserved
Data might get lost due to memory corruption in SD memory card.

Check SD memory card's data regularly to check its operation
[NOTE] Format SD memory card at least once a week for optimal performance



HOW TO FORMAT SD CARD
1. Insert SD Card to user PC
2. Select [Start] -> [My Computer]
3. Select SD card driver and right click and select "Format"
4. Select "FAT32"
If "FAT" format is to be selected, device will not function normally
5. Click "Start" button

Do not remove SD memory card during product operation while power is on
Product or SD memory card could be damaged.

Manufacturer is not liable for SD card's recorded contents outside SD card limited product life

3. Product Package

Please confirm below package list in the box

Device

SD Card
(Included View-i PC Player)

Cradle &
Double Side Tape x
2ea

User Manual

IR Lighting
Module
(Ruby Model Only)

Wire Clip x 6 ea

TV-out Cable

Cigarjack
Power Cable

TV-out cable : Display which doesn't have composite port must be adjusted to the correct display format

Product package may change for product enhancement without any notification

4. Functions

Function	Description
Constant Recording	**Records everything during device power on status** [NOTE] If memory exceeds its capacity, device deletes oldest file to make room for new recordings. Therefore, if user wants to keep the old recordings, user must backup the recordings before they are automatically deleted
Event Recording	**When device detects exceeded force in the device, device automatically saves 15 seconds before and after of the triggered event.** (Reference: 7.View-i Product Manual) [NOTE] Event videos can be saved upto 200 files. If event files saved upto 160 files, device alerts sounds(beep-beep-beep) to warn the user. If event files are saved upto 200 files, device alerts sounds(tee-lee-lee) and starts deleting oldest recording to save room for new recordings. Therefore, if user wants to keep the old recordings, user must backup the recordings before it is automatically deleted
Audio Recording	**Supports audio recording with on/off button** (Reference: 5. Features)
JPEG Capture	**Supports JPEG capture** (Reference : 7.View-i Product Manual)
GPS Sensor	**Internal GPS records time/speed/route information.** (View-i Pro/Gold/Ruby product only) These information can be checked with View-i PC Player (Reference : 8.View-i PC Player Manual) [NOTE] GPS needs to be connected to Satellite before recording
G-Sensor	**Internal G-sensor records quick start/stop/curve information** This information can be checked with View-i PC Player (Reference : 8.View-i PC Player Manual)
TV-out	**User can check recorded files to nearest display with TV-out function** (Reference : 5. Features)

4. Functions

Function	Description
View-i PC Player	**View-i PC Player can be used to check recorded videos on SD card**
Google Map Sync	**View driver's route in Google Map embedded in View-i PC Player** [NOTE] GPS needs to be connected to the satellites in order to sync data with Google Maps
G-Sensor Graph	**View G-force data with View-i PC Player**
ECO-Drive Report	**Driver driving patterns can be diagnosed using GPS & G-Sensor data.** This data will coach drivers to develop safer driving habits [NOTE] Functions are limited for non-GPS products
Event Report	**Creates reference report detailing the accident which may be helpful to police or insurance company** [NOTE] Functions are limited for non-GPS products
CRASH GUARD™	**CRASH GUARD™ system is provided inside View-i PC Player,** **View-i PC Player can recover corrupt data occurred by SD card being separated from the device** [NOTE] CRASH GUARD™ cannot repair any data if SD card's file system was damaged or SD card was physically damaged

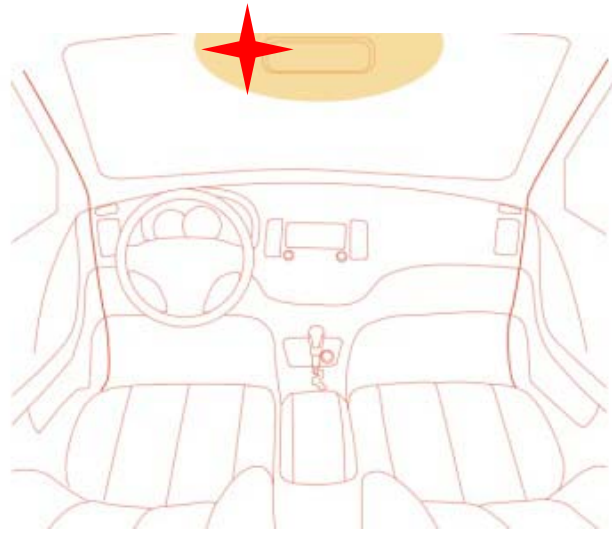
5. Features

#	Name	Description
①	Power Port	DC 12V/DC 24V
②	Internal GPS	GPS
③	Front Camera	130M Pixel CMOS Image Sensor
④	Power Switch	Device Power on/off switch
⑤	TV-Out Port	Preview/Replay recorded files to nearest display (NTSC/PAL)
⑥	Mic Switch	Mic on/off switch
⑦	Buzzer	Status buzzer
⑧	Manual Recording	User can activate Event Recording
⑨	Memory Format	User can format inserted SD card
⑩	Video Replay/ JPEG Capture	User can replay recorded videos User can capture JPEG image
⑪	LED	Status LED for Power status, GPS reception, Mic status, Recording status
⑫	Rear Camera	1.3M Pixel CMOS Image Sensor
⑬	SD Cart Slot	SD memory card slot
⑭	IR Lighting	IR Lighting for Rear Camera / RUBY Model Only

6. Installation

6.1 Recommendation

For Sedans and SUVs, install the device near rear view mirror to the driver side where GPS and Camera does not have physical interrupts

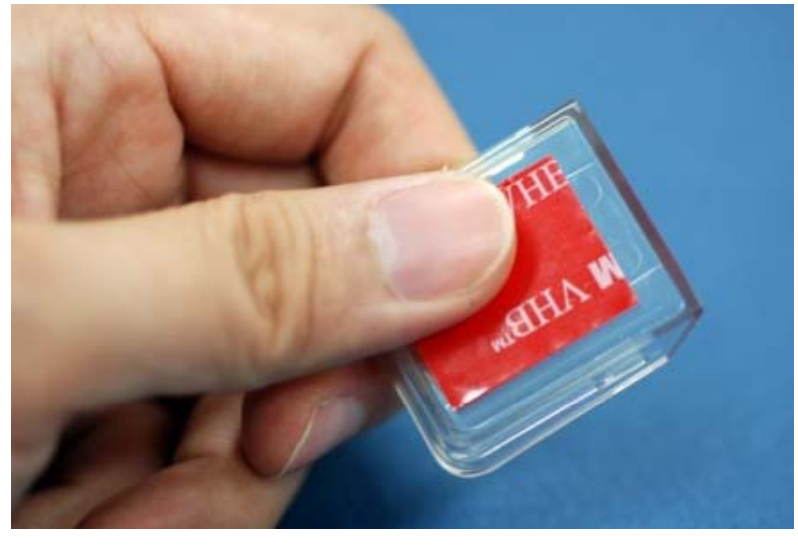


6.2 Placing the Cradle

Remove tape cover and place according to the diagram in 6.1 with open side up

[NOTE] If device was installed any place other then what is recommended in diagram 6.1, it will prevent optimal functioning of the GPS reception and camera

[TIP] Please wipe the wind shield clean before placing the cradle.

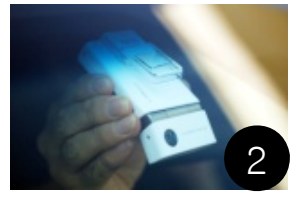


6. Installation

6.3 Installing the product into the Cradle

1. Insert SD memory card to the product
2. Hold product so camera part is at the bottom and then slide it into the cradle from top to bottom until it makes a clicking sound
3. Connect the power cable from product to cigar jack of your vehicle. Then organize the lines using line clips
4. Adjust the camera angle to your preference

[TIP] Use TV-out cable to connect to nearest display to check the actual recording view and make sure hood and dashboard does not show over ¼ of video's bottom screen



RUBY Products :

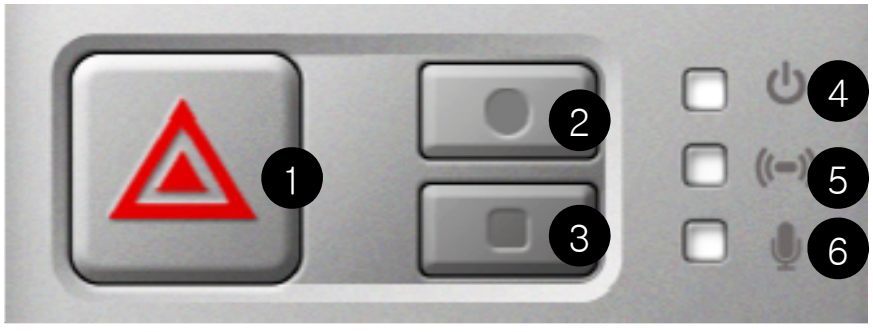
5. Remove the tape cover
6. Attach IR lighting facing the same direction as Rear Camera

[NOTE] If direction of the Rear Camera and IR Lighting does not align, Rear Camera recordings might not record correctly. Please note vibrations and humidity of the vehicle might detach the IR Lighting

6.4 Confirmation

1. Check to see that the SD card is correctly placed into the device and power switch is on
2. Start the car engine and check power is correctly connected to the device
3. Check Red LED is on following with Blue and Orange LED blinks.
4. Listen for a beep sound of 1CH products, 2 beeps for 2CH products and Orange LED to stop blinking (booting complete, recording starts).
5. GPS connection can be confirmed as follows:.
   If Blue LED blinks on and off, GPS reception is not complete and still in search
   If Blue LED does not blink and stays on, GPS reception has been made

7. View-i Product Manual



#	Name		Recording Mode	Replay Mode(TV-OUT)
①	Manual Recording Button		Manually start event recording If button is pressed, device will make "tic-tic" sound and blue and orange LED will blink quickly	Same as Recording Mode
②	Memory Format Button	Short Press	No function	Previous File
		Long Press	Hold for 8 seconds to start formatting SD card after a beep. 2 beeps will sound after completing the format	Change folders
③	Video Replay / JPEG Capture	Short Press	JPEG capture	Next File
		Long Press	Press for more then 2 seconds, device will change to Replay Mode	Press for more then 2 seconds, device will change to Recording Mode
② ③	Rear Camera ON/OFF Button		[Applies for on/off both] Press #2 button followed by #3 button If rear camera is successfully turned off, device will make 3 beeps. Device will make 5 beeps if rear camera is turned backed on	
④	Power LED		Red LED, Displays Power On/Off Status	
⑤	Function LED		Blue LED, Displays GPS Reception Status	
⑥	Mic LED		Orange LED, Displays Mic On/Off Status	

7. View-i Product Manual

7.1 Buzzer/LED Scenario

Name	Buzzer	LED
Booting Status	1 beep for 1CH products 2 beeps for 2CH products	Red LED : On Blue LED : Blink Orange LED : Blink
SD Card Insert Status	If SD card is not inserted, Device will make a beep sound every second till SD card is inserted	Red LED : On Blue LED : Blink Orange LED : Blink
Constant Recording Status		Red LED : On Blue LED : Operate according to GPS status Orange LED : Operate according to Mic status
GPS Reception Status		Red LED : On Blue LED : Blink = search / On = GPS connect Orange LED : operate according to Mic status
Event/Manual Recording Status	Short "tic-tic"	Red LED : On Blue LED : Blink (Fast Blink = 0.5 sec) Orange LED : Blink (Fast Blink = 0.5 sec)
Mic On/Off	Short "tic"	Red LED : On Blue LED : Blink Orange LED : On/off according to Mic status
Power Off Status	"Beep~"	Red LED : Off Blue LED : Off Orange LED : Off
Event/Manual Recording Memory Full Alert	80%:"Beep Beep Beep ~ Beep Beep Beep" 100% : "Tee-lee-lee"	Red LED : On Blue LED : Operate according to GPS status Orange LED : Operate according to Mic status

8. View-i PC Player Manual

This part of the manual explains the use of View-i PC Player, video and utility player. With View-i PC Player, user may view the contents of View-i Lite/Pro/Silver/Gold products.
* Windows Media Player and other player may show videos but G-Sensor, GPS, MAP, Report functions can only be used in View-i PC Player.

8.1 System Requirement

Item	Description
Operating System	Window XP, Windows Vista, Windows 7
CPU	Pentium 4 / 1.8Ghz Processor or above
RAM	More then 512MB
Free HDD Space	More then 200MB
Display	More then 1024 x 768 pixels

8.2 Installing the Software

1. Connect SD card into the computer
2. Clikc [Start] and enter [My Computer]
3. Select SD card drive and double click “Setup.exe” file in the product folder
4. Follow installation instructions
6. Select [Start]->[Programs]->[View-i]-> View-i PC Player to start the application

* Check http://www.avic.co.kr for latest View-i PC Player updates

8. View-i PC Player Manual

8.3 View-i PC Player - 1 Channel

Double click on "View-i" icon to view the below screen. (View-i Lite/Pro)

#	Name	Description
①	Video Screen	Video play screen of designated video file
②	G-Sensor Graph	G-sensor data of video screen for user analysis
③	Speed-o-meter / Menu	Display driving speed (View-i Pro) Button listing for video and menu control
④	File Search	Search function for listed video files
⑤	File Information	Displays file name and recording type Displays GPS information (View-i Pro)
⑥	Google Map	Displays current position of the video on Goggle map (Internet connection required : View-i Pro)

8. View-i PC Player Manual

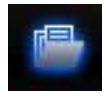
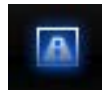
8.4 View-i PC Player - 2 Channel

Double click on "View-i2" icon to view the below screen. (View-i Silver/Gold/Ruby)

#	Name	Description
①	Front Video Screen	Front video play screen of designated video file
②	Rear Video Screen	Rear video play screen of selected front video file
③	File Search	Search function for listed video files.
④	Speed-o-Meter/ Menu	Display driving speed (View-i Gold/Ruby) Button listing for video and menu control
⑤	File Information	Displays file name and recording type Displays GPS information (View-i Gold/Ruby)
⑥	G-Sensor Graph	G-sensor data of video screen for user analysis
⑦	Google Map	Displays current position of the video on Goggle Maps (Internet connection required : View-i Gold/Ruby)

8. View-i PC Player Manual

8.5 Buttons

Button	Description	Button	Description
	Previous File		Open 1 file
	Rewind		Print Screen
	Play		ECO-Drive Report
	Pause		Event Report
	Stop		Setting
	Fast-forward		Play Speed Control
	Next File		

8.6 Control Bar

Volume Control : Video volume control with mute function

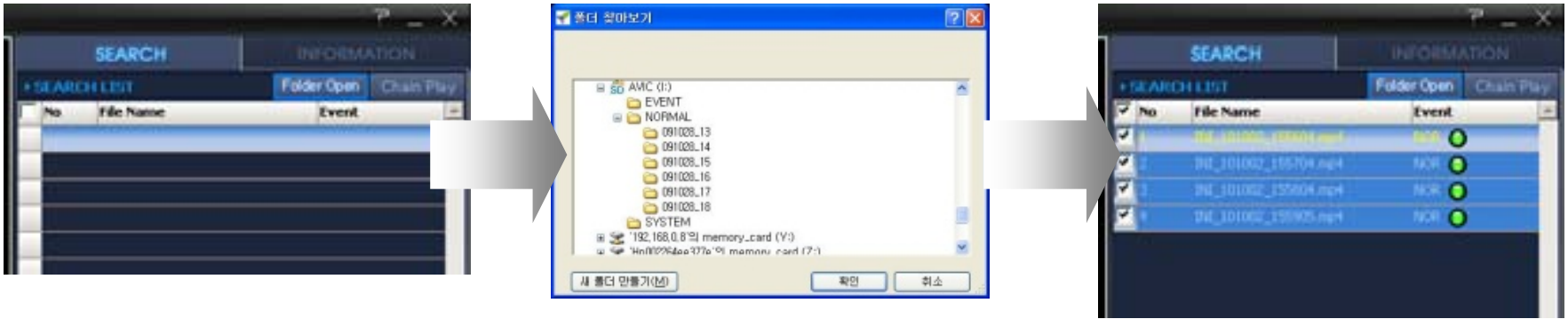
8. View-i PC Player Manual

8.7 Open File / Play

- Recorded contents can be found inside device's SD card.
  Constant files can be found under "NORMAL" folder / folder name under date/hour.
- Event videos can be found under "EVENT" folder.
- Move the recorded videos to user computer for best performance.
  (video play navigation, search, etc)

1. Opening single file and playing
   Click on the button located lower part of View-i PC Player.
   Navigate to the folder to find the wanted play contents and double click on the video file to play.

2. Opening a folder and playing
   - Click on "Folder Open" button on the top right of Search screen.
   - Navigate to the folder of user choice and select "OK" button
   - When the file list appears in the Search screen, check the checkbox in the left of the file name and click on "Chain Play" to play the videos.



8. View-i PC Player Manual

8.8 File List Screen

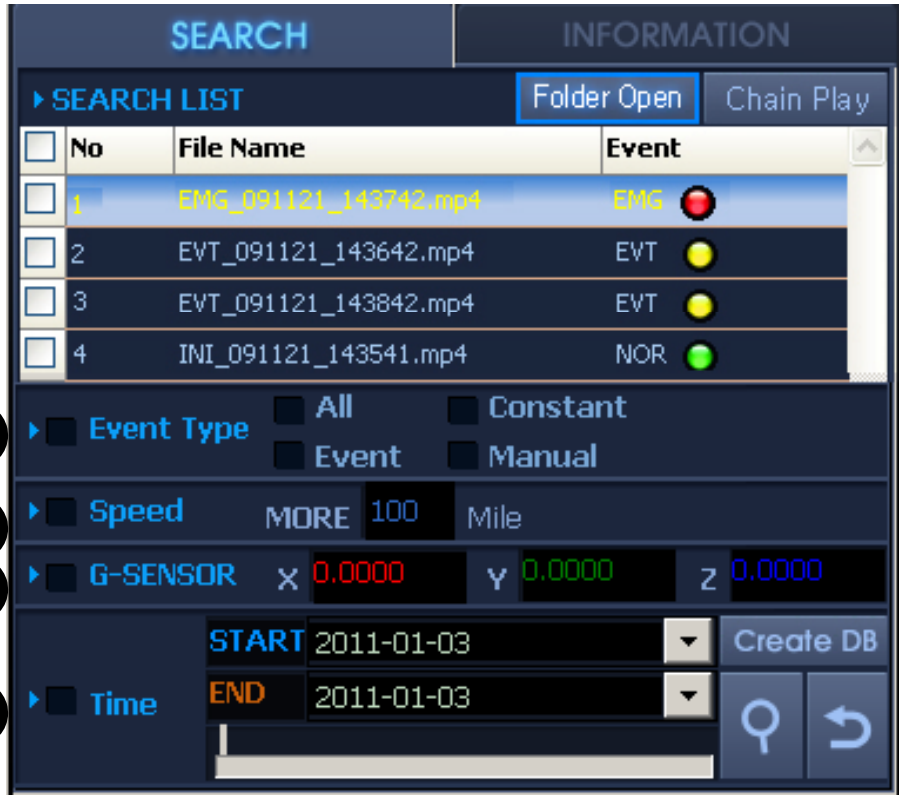
#	Name	Description
①	Folder Open	Open a folder with recorded videos
②	Chain Play	Play button for continual playing of checked listed files
③	File Name	File name consist of date/hour of recordings. EVT_090919_201518.mp4 -> EVT or INI : Recording type -> 090919 : 09/09/19 (date) -> 201518 : 20:15:18 (time)
④	Event Type	Displays recording type. (EVT : Event / EMG : Manual NOR : Constant)

• File can be organized by clicking on the top File Name, Event titles

#	Name	Description
⑤	NOR	Constant recording files display as “NOR”
⑥	EVT	G-Sensor triggered recording files display as “EVT”
⑦	EMG	Manual button triggered recording files display as “EMG”

8. View-i PC Player Manual

8.9 Search – DB



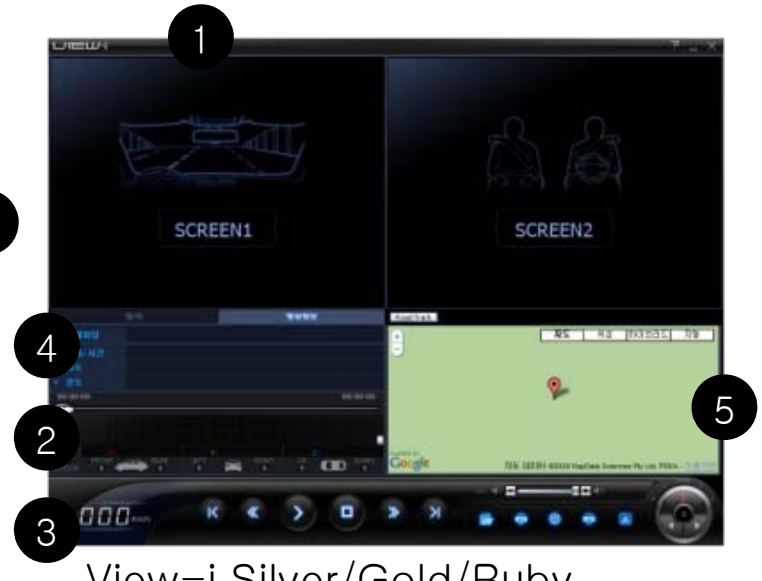
1. Import play list to the Search screen
   (Reference : 8.6 Open File / Play)
2. Click on “Create DB” to make database
*Database must be created before searching
3. Select search option and click “Search” bu
tton
4. Searched list will appear in Search screen
6. Click on “Chain Play” to play searched file

#	Name	Description
①	Event Type	Select recording type to filter videos with selected recording type
②	Speed	Input speed value to filter videos above selected speed value
③	G-Sensor	Input X/Y/Z G-sensor values to filter videos above selected G-sensor value
④	Time	Input time value to filter videos within time section

8. View-i PC Player Manual

8.10 Play Screen

View-i Lite/Pro



View-i Silver/Gold/Ruby

#	Name	Description
①	Video Screen	Video play screen of designated video file
②	G-Sensor Screen	G-sensor data of video screen for user analysis
③	Speed-o-Meter / Menu	Display driving speed (View-i Pro) Button listing for video and menu control
④	Information Screen	Displays file name and recording type Displays GPS information (View-i Pro)
⑤	Google Map	Displays current position of the video on Goggle map (Internet connection required : View-i Pro)

8. View-i PC Player Manual

8.11 Google Map Interface

1. View-i PC Player supports Google Map interface
   Internet must be connected for Google map interface
2. Navigate through Goggle Map with mouse cursor

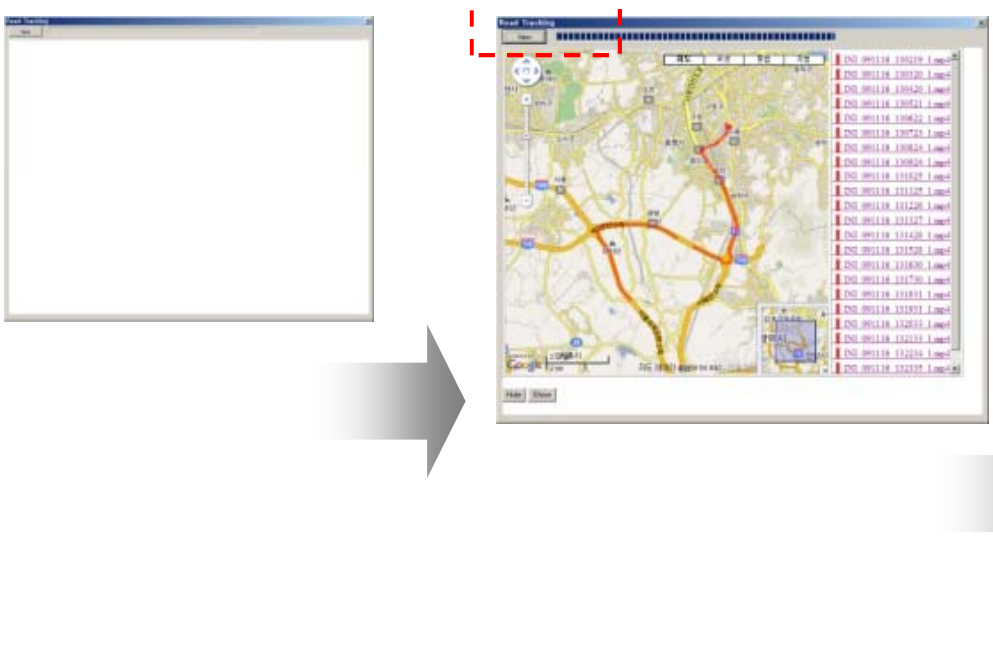
Number	Description
①	Adjust Map size + : Zoom in − : Zoom out
②	View Mode (Map, hybrid, landscape)
③	Current Position

[NOTE] Depending on Google API policy, service might be disconnected without notice

8.12 Road Track™

1. Road Track™ shows driving path of selected files. In order to use this function, user must first call in the video files and create database
2. After creating the database, click on button Road Track
3. After new map screen appears, press View button

4. Use Hide button or Show button to display or hide driving route in the Google Map

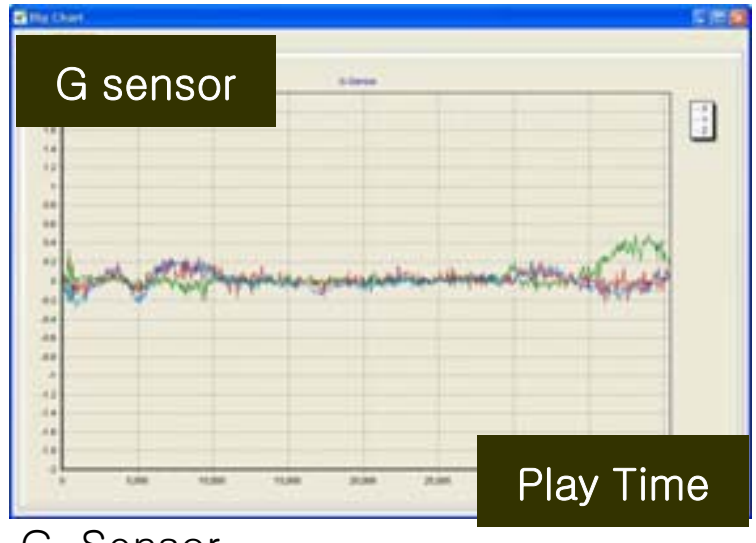


8. View-i PC Player Manual

8.13 Speed/G-Sensor

1. View-i PC Player supports detailed view of speed and G-Sensor data
2. Click on “Big Chart” button in the G-sensor screen to display below pop-up screens

Speed
Supported by View-i Pro/Gold/Ruby



G-Sensor

G-Sensor data can be used for road conditions or driver’s driving pattern analysis

Axis	Description
X-Axis	Display Vehicle’s X axis movement - Quick Start / Quick Stop
Y-Axis	Display Vehicle’s Y axis movement - Quick Turns
Z-Axis	Display Vehicle’s Z axis movement - Up/down movement

8. View-i PC Player Manual

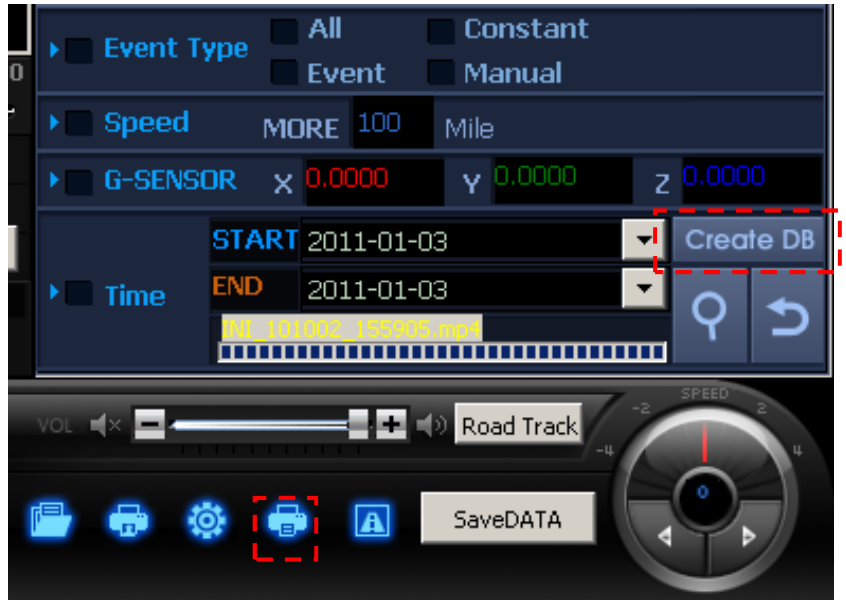
8.14 Screen Capture Print/Save

1. View-i PC Player supports screen capture function which can print / save specific screen of user choice
2. Click on button to view the screen below

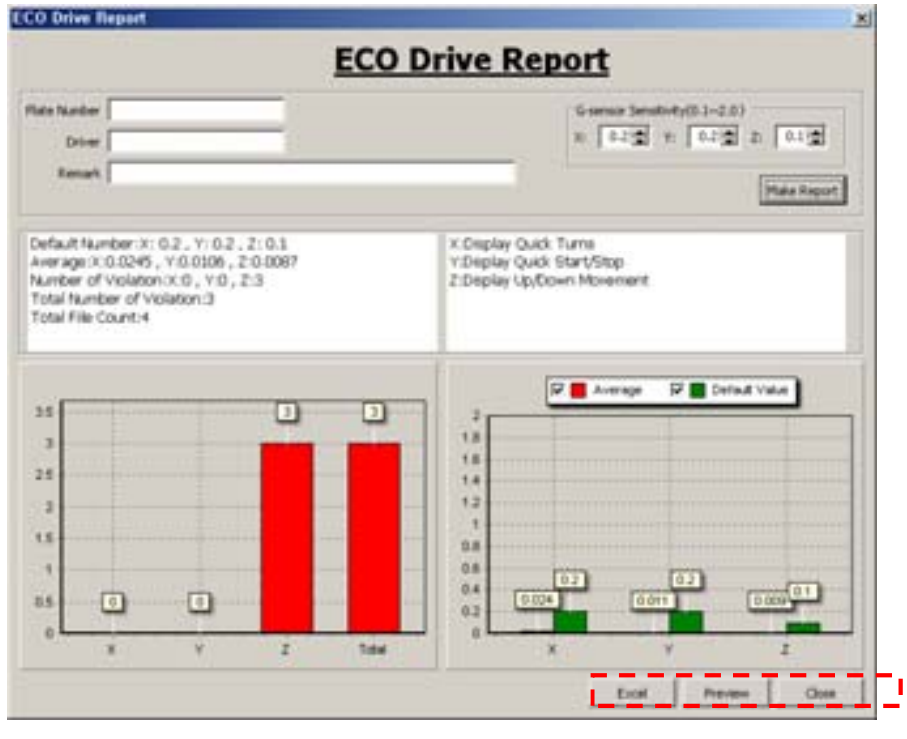
#	Description
①	G Sensor Data
②	GPS Data (View-i Pro/Gold only)
③	PRINT button for image print
④	SAVE button for create JPEG image file

8.15 ECO-Driver Report

1. Create database from user selected video files
2. Click “Eco-Drive Report” button



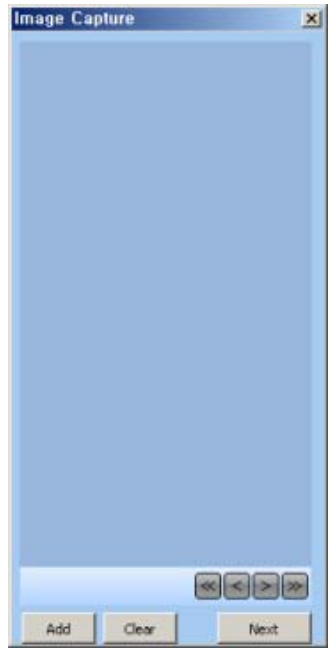
3. Input basic user information and click “Make Report” button to create a report
4. Use “Excel” and “Preview” button to save the report to a file or print



8. View-i PC Player Manual

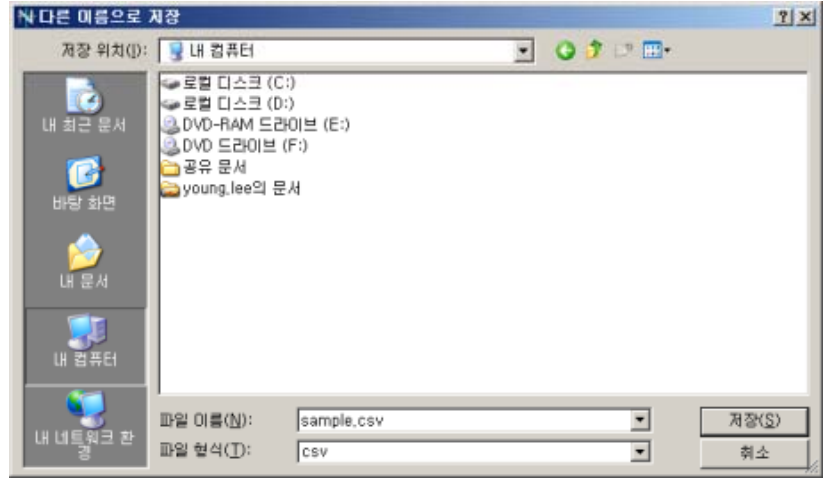
8.16 Event Report

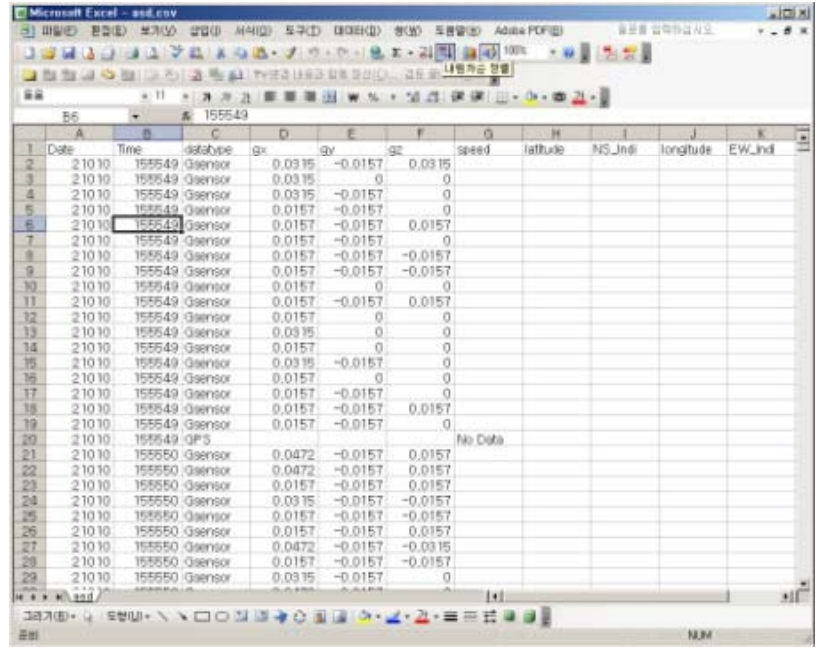
1. Click on “Event Report” button to retrieve the image capture screen
2. Click on the “Add” button to save 4 different video screen and click on “Next” button
3. Use “Clear” button to remove selected screens
4. Input basic information and click on “Preview” button to create the report



8.17 GPS/G-Sensor Data Export

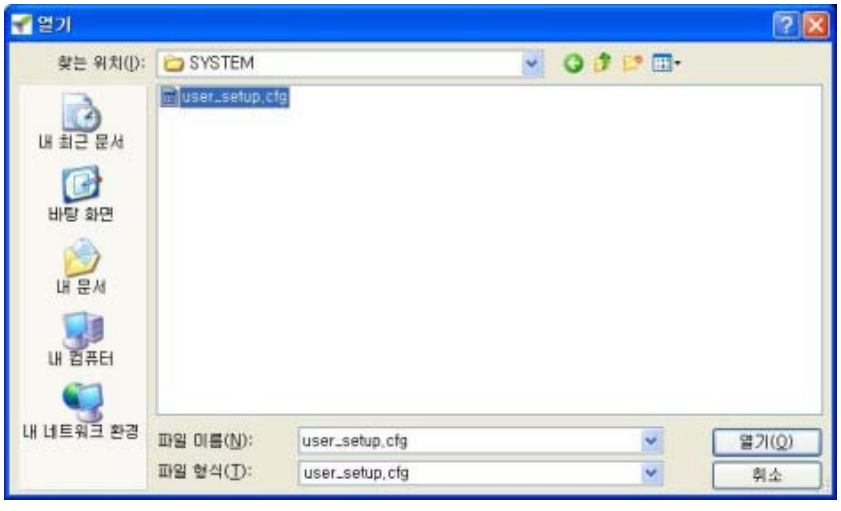
1. Create database from user selected video files
2. Click “Save Data” button
3. Save CSV file to user preference location in PC
4. User may utilize *.csv file in their preference





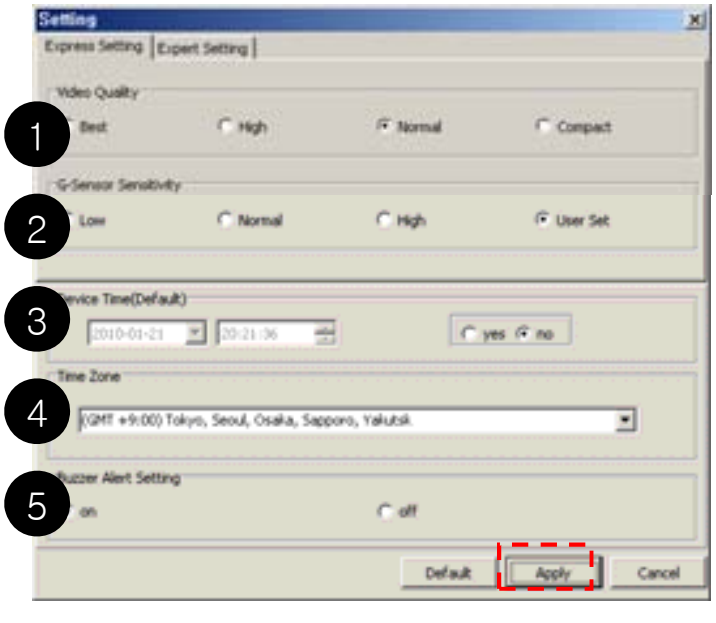
8. View-i PC Player Manual

8.18 Setting - Open



1. Click on button
2. Select user_setup.cfg file in your SD Card
3. Click on “Open” button.

8.18.1 Setting - Express

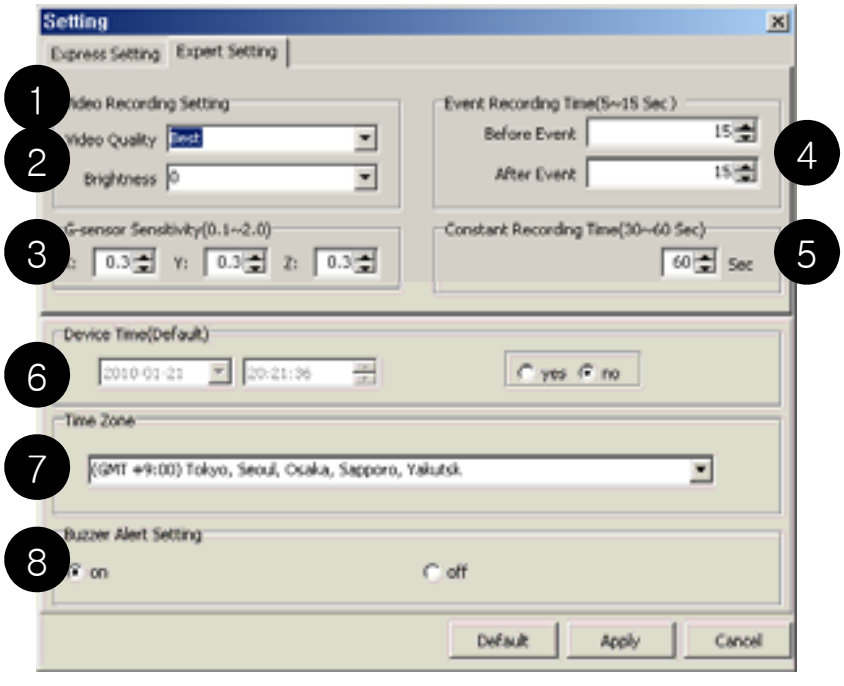


1. Express setting allows for quick and easy device configuration

#	Name	Description
①	Video Quality	Video quality setting
②	G-Sensor Setting	G-Sensor sensitivity select (Low = sensitive / High = Dull)
③	Device Time	VIEW-i Lite/Silver user must manually set the time
④	Time Zone	Select user time zone
⑤	Sound Setting	Buzzer on/off

2. Click “Apply” button and re-insert SD Card to the device to save the changes.

8.18.2 Setting - Expert



#	Name	Description
①	Video Quality	Best : 1.3M@VGA 17fps Good : 1.3M@VGA 20fps Normal : 0.3M@VGA 30fps Compact : 0.3M@QVGA 17fps
②	Brightness	(Dark)-4 ~ +4(Bright)
③	G-Sensor Sensitivity	0.1~2.0 (Low=sensitive / High=dull)
④	Event Recording Time	0~15 sec for before and after Event triggers
⑤	Constant Recording Time	Lite/Pro : 30sec~1min Silver/Gold/Ruby:30sec~2min
⑥	Device Time	Select user local time
⑦	Time Zone	Select user time zone
⑧	Buzzer	Buzzer on/off

1. Do use Express setting unless you are an advanced user
2. Click “Apply” button and re-insert SD Card to the device to save the changes

9. View-i Product Trouble-Shooting

Symptom	Solution
No Power	Please check power cable connection to the device Please check power cable connection to vehicle power source Please check power switch on the device If all power connections are correct then remove SD Card and re-insert and try again If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
"Beep ~ Beep" sound does not stop	Please check to see if SD card is correctly inserted Please back up and format the SD card (FAT32 / Block size 32Kb) If you have attempted the above remedies, and the device is still not working properly, SD card may have reached its end of product life. Please contact your dealer to purchase new SD card
LED keeps Blinking	LED may blink if there are any problem with SD Card Please back up and format the SD card (FAT32 / Block size 32Kb) If you have attempted the above remedies, and the device is still not working properly, SD card may have reached its end of product life. Please contact your dealer to purchase new SD card
Recording videos does not play correctly	Please check lens for any alien substance. If videos are too dark, please raise the brightness in the setting configuration If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
Recorded files has no sound	Please verify that the mic switch is turned on; orange LED should be lit If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
Event Recording does work	Please check event recording settings in the View-i PC Player setting menu If you have attempted the above remedies, and the device is still not working properly, please contact your dealer
GPS reception does not function correctly	Please check device installation inside the vehicle and install accordingly to the manual Please remove all possible metallic parts from the vicinity of the device If you have attempted the above remedies, and the device is still not working properly, please contact your dealer

10. Specification and Certifications

List	Description
Camera	1.3M Pixel CMOS Image Sensor - 1Ch(View-i Clik/Lite/Pro), 1.3M Pixel CMOS Image Sensor - 2Ch(View-i Silver/Gold/Ruby)
View-Angle	Front View angle 120° / Rear view angle 149 °
GPS	Internal GPS (only in View-i Pro/Gold/Ruby)
G-Sensor	Internal G-Sensor
Video	1CH : MPEG4 1.3M Pixel 20fps(max) / MPEG4 0.30M Pixel 30fps(max) 2CH : MPEG4 1.3M Pixel 10fps(max) / MPEG4 0.30M Pixel 15fps(max)
Audio	Internal Mic, AAC Codec
Storage	SD Card (Max 16GB)
PC Viewer	View-i PC Player, Windows Media Player, and more
Voltage	12V~24V
Size	52(W) x 94(H) x 18(D)mm
Weight	View-i Clik/Lite : 70g / View- Pro/Silver : 85g / View-Gold/Ruby : 90g
Manufacturer	AVIC Imaging Inc. / Manufactured in South Korea
Certification	KCC / FCC / CE / / RoHS

Warranty

Thank you for purchasing AVIC Imaging Inc.'s product.

Product	View-i Lite / View-i Pro / View-i Silver / View-i Gold / View-I Ruby		
Model	VSDR-1000 / VSDR-1100 / VSDR-2000 / VSDR-2100 / VSDR-2200		
Name		Serial Number	
Phone		Email	
Address			
Purchase Date		Dealer	

Guarantee

1. AVIC Imaging Inc. grants the following warranty period on the product commencing on the date of purchase.
2. Warranty Period : see store policy

www.avic.co.kr

Screens and pictures may be different in product use
View-i® Lite/Pro/Silver/Gold/Ruby